

## **Mt Diablo State Park Primary Road Improvements**

### **Project Description**

#### **PURPOSE OF PROJECT**

This project would make high priority improvements to the primary road system that serves Mt. Diablo State Park.

#### **SCOPE OF PROJECT**

The work will improve the safety of the road conditions for both motor vehicles and bicyclists and would prevent further erosion and degradation of the existing road system. The following is a summary of the improvements as they apply to all portions of the project and individual roadways:

##### **All Roadways**

- Repairs, alterations, and improvements to culverts would include “upsizing” of existing pipes, installation of additional pipes, replacement of existing pipes, and repair or construction of new inlet and outlet structures.
- Roadway drainage around curves of the fill side of the roadway would be channeled into overside drains and, ultimately, into existing drainage swales, using mountable asphalt concrete (AC) dikes (Caltrans, Type D or similar).
- Rock slope protection would be placed on the cut side of the roadway, where appropriate, to slow the flow of water (reducing erosion) and create a smaller vertical drop adjacent to the roadway.
- Approximately 750 cubic yards of clean spoils will be stockpiled at the Turtle Rock Complex playing fields. Best Management Practices (BMPs) for erosion control will be adhered to including containing the stockpiled spoils with hay bales. All other spoils from the project will be disposed of offsite.

##### **South Gate Road**

- Repair/improve/upgrade a total of thirty-three pipe culverts along this road.
- Reconstruct or stabilize approximately 500 linear feet of road base structural sections with reinforcing geotextile fabric; install a subdrainage system to divert water away from the road section prism.

##### **North Gate Road**

- Repair/improve/upgrade a total of fifty pipe culverts along this road.
- Reconstruct or stabilize approximately 1,200 linear feet of road base structural sections with reinforcing geotextile fabric; install a subdrainage system to divert water away from the road section prism.
- Repair existing retaining walls, using geogrid reinforced fill.
- Restore existing road embankment, using geo-grid reinforced fill, at locations where severe subsidence is occurring.

##### **Summit Road**

Summit Road has many of the same types of problems as North Gate and South Gate Roads, but the road surface is in the worst condition of the three main roads in Mt. Diablo SP. The existing pavement shows severe block shrinkage and cracking.

- Repair/improve/upgrade a total of thirty-five pipe culverts along this road.
- Expand the width of several portions of the roadway to reestablish adequate shoulder and road width for safety, stability, and resource protection.
- Replace existing road surface; install aggregate base with asphalt concrete overlay (approximately 4.5 miles), including necessary patch work and geotextile fabric.
- Reconstruct repair area R6, just north of post mile 2, using a geo-grid reinforced fill.